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ABSTRACT

The paper specifies competency domains for multidisciplinary teams involved in vocational and technical education for handicapped secondary learners. Six competency domains (including collaborating with other professions and parents in the student assessment process and identifying available assessment instruments) are listed, and 10 common skills and knowledges for all team members are set forth, specific skills and knowledges are then listed for secondary special educators, school psychologists, and vocational educators. The authors provide an occupational analysis of the area of carpentry (residential construction and a task analysis of rough framing) for the development of an individual educational plan. The authors conclude that changes must be made immediately and suggest that inservice programs be initiated to develop competencies necessary for educating handicapped learners in vocational and technical education programs. (CL)

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Needed A Team Approach: Providing Programs For Handicapped Learners in Vocational and Technical Education

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NEEDED A TEAM APPROACH: PROVIDING PROGRAMS FOR HANDICAPPED LEARNERS IN VOCATIONAL AND TECHNICAL EDUCATION

Introduction

Both PL 94-142, Education for All Handicapped Children Act, and PL 94-482, Vocational Educational Ammendments of 1976, require that appropriate educational programs be provided for handicapped learners within the public educational system in the least restrictive setting, implemented through the mainstreaming concept. Mainstreaming of the adolescent and adult handicapped learner in secondary and post-secondary settings demands individualization and cooperation (Vance, 1977; Laurie, et al, 1978). Inherent in the concept of mainstreaming is that some handicapped and special needs learners receive the necessary support to help them succeed in regular occupational education programs, regardless of handicapping condition. This approach can be successful with the majority of learners.

Successful educational programming will require that a multidisciplinary team approach be initiated (Goodman and Price, 1978). The team approach requires personnel to be capable of dealing with a wide variety of learner needs and handicapping conditions. These extremely varied needs can be met most successfully through a team approach rather than expecting one individual to possess a multitude of competencies.

Assumptions

Before elaboration of the components of the team is presented, two assumptions about the nature of the task of

mainstreaming handicapped learners should be considered. It is first assumed that since handicapped learners are to have access to vocational education programs, they will necessarily have to receive instruction from vocational education teachers. The vocational education teachers, although remaining the primary instructors, will need assistance from specialized personnel who have expertise in working with handicapped learners. Two such specialists are special education teachers and school psychologists. A special education teacher would function as an on-site consultant to the vocational education teachers, and the school psychologist would function as a consultant-on-call to several teams, each comprised of a vocational education teacher and a special education teacher (Laurie, et.al., 1978).

Secondly, it is recognized that vocational educators will need to endorse the concept of differential programming as it is applied to a particular skill area. No longer should the notion suffice that handicapped learners ought to be channelled into only the service occupations. This notion of programming relegates handicapped learners to a few restricted areas of work. Rather, multiple levels of entry and exit should be established in each skill area to better accommodate the abilities of handicapped learners (Godla,1978). Vocational educators will need to determine the need for and nature of "helpers" - trained persons who have yet to achieve skills suitable to attaining journeymen status, but who possess skills suitable for performing necessary jobs in a wide range of skill areas of the world of work. Vocational Education must commit itself to differential programming or it will

be saddled with an increasing dropout rate contributed to by the failures of special needs learners. The inextricable relationship between vocational education and the world of work indicates that differential programming is very appropriate for the vocational education setting. The flexible continuity in this relationship could insure that a handicapped learner could find entry into the world of work at one of several levels and continue to acquire skills on-the-job.

The above propositions require bold moves by a highly supportive administration. This movement will be unsteady, primarily because present training programs are not preparing special education teachers and school psychologists to function in the team roles suggested. Before such roles can be realized, the competencies and knowledge necessary to facilitate a team effort must be articulated.

Competency Domains

Phelps, Evans, Abbas, and Frison (1976) identified six tasks as being critical to overall vocational program effectiveness for handicapped and special needs learners. These tasks were derived from a survey of vocational instructors and special and regular educators as necessary for the successful day-to-day instruction of students being mainstreamed into various program alternatives.

1) Collaborating with other professions and parents in the student assessment process,
2) identifying available assessment instruments,
3) coordinating instructional planning in academic and

vocational areas,

4) developing performance goals and objectives for individual students,

5) providing reinforcement for learning, and

6) providing career counseling and guidance. (p. 130)

The successful implementation of these tasks require the team members to share knowledges and skills in common. The following competency domains are suggested for each of the team members.

COMMON SKILLS AND KNOWLEDGES

1. Learning theory and instructional technology and research with skills necessary to translate these knowledges and skills into developing academic, career and vocational programs.
2. Human development with an emphasis on adolescent developmental tasks.
3. Rationale, legislation, and existing practices in the development of programs, goals, and philosophy for special needs learners which include the exceptional individual.
4. Knowledge of who is exceptional and disadvantaged to be included as special needs learners under existing state and federal legislation.
5. Career development theory which parallels that of growth and development theory.
6. Career education rationale, concepts and instructional strategies necessary to implement programs in educational settings.

7. Sexism and racism and necessary skills to reduce institutional discrimination in order to broaden the career, educational, and social opportunities for all learners.
8. Classroom management techniques used with group and individual learners that will motivate optimal effort in achievement, reduce inappropriate behaviors, and enhance the incividual and group welfare.
9. Collaboration with other educators, specialists and parents in establishing instructional goals in academic and vocational areas to meet the requirements for graduation.
10. Human relations and decision making skills to assist learners and their parents select realistic career and vocational goals.

SPECIFIC SKILLS AND KNOWLEDGES FOR SECONDARY SPECIAL EDUCATORS

1. Methods and design of curriculum for exceptional learners, including the scope and sequence based on the learner's developmental level and learning characteristics and learner needs. This includes development of academic skills, survival skills, and functional needs to meet the demands of daily living.
2. Special instructional methodologies utilizing assessment information for individualized and group insturction incorporating the learner's academic needs, interests, attitudes, and values into instructional plans using: tutorial procedures, programmed instruction, prescriptive/ diagnostic teaching, and group instruction.

3. Selection and adaptation, where necessary, of commercially published instructional materials appropriate to the educational objectives, age, and interests of special needs and handicapped learners.
4. Assessment of the student with appropriate informal, criterion-referenced, or competency-based tests as well as formal standardized, or norm-referenced instruments for educational diagnosis.
5. Personal or social intervention strategies and skills necessary to facilitate the affective growth of learner's self-concept, attitudes, values, and inter/intra personal relationships.
6. Career and guidance information and counseling skills to assist students operationalize vocational interests and attitudes.
7. Coordination of instructional planning in academic areas for students with learning problems, i.e. reading, math, etc., necessary for graduation.
8. Assistance to parents in understanding the strengths and limitations of the learner and develop realistic expectations in academic and occupational skill areas.
9. Engagement in individual and group activities and discussions which assist in value clarification and development of habits, attitudes, and self-concept.

SPECIFIC SKILLS AND KNOWLEDGES DOMAINS OF SCHOOL PSYCHOLOGIST

1. Individual and group assessment strategies and skills necessary to develop or select, administer, and interpret a

variety of instruments, and translate the resulting data into appropriate educational, decision-making, and behavior management programs (mental ability, aptitude, interest, career maturity, work samples, behavioral observations, achievement, and personality).

2. Individual and group counseling practices and skills necessary to assist individuals in career, educational, and personal planning and problem solving.
3. Community resources and skills necessary to make appropriate referrals and act as liason between school and referral agencies.
4. Consultation strategies and skills necessary to assist learners by working through others (teachers, counselors, parents, administrators, peers, employers, etc.).
5. Inservice education techniques and skills necessary to develop, implement, and evaluate such programs on a variety of topics for faculty.
6. Special instructional methodologies and skills necessary to select and recommend them for appropriate individuals and groups (regular, handicapped, disadvantaged).
7. Affective education concepts and skills necessary to develop and implement strategies to facilitate improvement in self-concept, attitudes, values, and interactions with others.
8. Research and program evaluation and skills necessary to acquire evidence of the effectiveness of vocational, special, and career education programs.
9. Educational trends and state and federal legislation which may influence the development of vocational, special, and career education programs.

SPECIFIC SKILLS AND KNOWLEDGES FOR VOCATIONAL EDUCATOR

1. Methods and curriculum designs for occupational skill areas including scope and sequence of skills necessary to prepare for a specific occupation.
2. Cite and organizational management skills to develop a training program or adapt equipment, where necessary, to prepare special needs and handicapped learners for an occupation to enter the labor market.
3. Instructional materials development and adaptation to assist special needs and handicapped learners acquire the concepts and skills required for an occupation.
4. Special instructional methology to assist the special needs learners acquire terminology and concepts of a specific occupation.
5. Occupational information and skills necessary to assist in career and vocational guidance and program development to teach and facilitate realistic occupational pursuits.
6. Community resources and skills necessary to make referrals for work placement, establish on-the-job training cites, and make job placements.
7. Subject matter information specific to occupational skill area.

The above competency domains may seem staggering at first until they are studied and agreed upon by the team. However, they are minimal skills and knowledges required if our educational programs are going to provide the most appropriate educational programs in the least restrictive setting.

The Problem

The purpose of including vocational instruction as part of a special learner's educational program is to provide a student with job entry skills into the labor market. The concept of multiple levels of entry and exit suggest that some students will leave the vocational training program as journeymen while others may need an extended training program as helpers in various occupational skill areas. In either situation, the goal is to train students whereby they will enter the labor market, make a wage to support themselves and their families, and find their respective place in our society.

To illustrate the concepts elaborated on throughout this paper it must be applied to a real situation. For the purposes of illustration, an occupational analysis of the carpentry field, sub-category residential construction, has been included. The analysis included does not claim coverage of every detail related to residential construction, but does cover the main work areas and tasks directly related to a course taught by vocational instructors.

Table I presents an analysis of the work areas and approximate percentages of time devoted to the teaching of skills related to each work area in the vocational class on residential construction. As may be noted, the work areas begin with the selection of a site for the construction and proceeds through the finishing work to complete the residential building for occupancy. Each of the work areas are task-analyzed to further specify the skills and knowledges required to complete each work area.

Table 1

Sample Occupational Analysis of Selected
Work Areas in Carpentry
Residential Construction Course

No.	Work Areas	Percentage of Time Spent in Area
1.	Site Planning	5
2.	Building Layout	5
3.	Foundation and Floor Construction	10
4.	Rough Framing	10
5.	Rafters	10
6.	Wall and Roof Sheating	5
7.	Sitting Windows and Doors	10
8.	Roof Covering	10
9.	Interior Wall Covering	10
10.	Cabinet and Built-ins	15
11.	Finish	10

Table 2 presents a task analysis of work area number four, rough framing. Those tasks which must be performed with precision as an

Table 2

Task Analysis of Work Area Four
Rough Framing

No.	Task Name	Task Necessary to Enter Job	Hold Job
1.	Selects appropriate tools	X	
2.	Determines proper stud length		X
3.	Selects top and bottom plate material		X
4.	Layout markings of top and bottom plate	X	X
5.	Sawing studs to proper length		X
6.	Determining correct header length for windows and doors	X	X
7.	Determining correct height for window and door headers	X	X
8.	Nailing materials in place	X	X
9.	Erecting wall		X

entry level skill and necessary to hold the job are also indicated. Note that identifying and selecting tools and measurement concepts are essential competencies that must be mastered by the handicapped or special needs learner to perform these tasks.

Two other necessary considerations for the student are the personal and social factors and environmental awareness. Under personal and social factors are attending class, ability to follow oral directions while working on-the-job, and getting along with fellow workers. The environmental awareness centers around the climatic conditions of the locality. Residential construction is mainly outside work in a wide variety of weather conditions. Thus, the student must be aware of proper clothing while working in changing weather conditions.

The IEP

The IEP meeting provides the ideal setting for the team to cooperatively develop the strategies for success in the vocational education program. It is the IEP that will specify specific responsibilities for each team member.

J.C. is a student enrolled in Central High School and his program includes enrollment in the county vocational technical school program for residential construction. J.C.'s IEP was developed cooperatively by the vocational instructor, special education teacher, school psychologist, parent and J.C.

INDIVIDUAL EDUCATIONAL PLAN

Student Name J.C. Date of Meeting 11-11-78

School Central High School

SUMMARY OF PRESENT LEVELS OF EDUCATIONAL PERFORMANCE

J.C. is currently a senior enrolled in a vocational education program with supportive assistance in special education. J.C.'s reading level is at the 3.5 grade level in recognition and comprehension measured by the PIAT. He is able to perform basic arithmetic operations, but has not mastered measurement skills. He learns best when he can see and manipulate concrete materials. He is accepted by his peers and cooperative with teachers. His career/vocational goals are to work in the housing construction trade.

ANNUAL GOALS

1. To develop job entry skills as a carpenter's helper.
2. To maintain a positive attitude toward self.
3. To communicate and understand (oral and written) the vocabulary and language needed for job entry as a carpenter's helper

SHORT TERM OBJECTIVES

Given the necessary instructional materials, tools equipment, and requsite knowledge, the learner will:

1. Read, name, and select appropriate tools and technical vocabulary for rough framing.

2. Select appropriate building materials for studs and plating.

3. Measure, mark, and saw wood to specified lengths. Criteria is 1/16 inch accuracy.

4. Increase silent reading comprehension of texts and manuals used in shop and carpentry.

5. Complete with 80% accuracy, World of Work Units, Time Cards, Employment Applications, Payroll Deduction Forms, Contracts, Social Security Information.

6. Participates in group affective education and counseling sessions with peers.

7. Participates in class project of building a house.

Objective Number	Educational Materials and Procedures	Individual Responsible	Amount of Time
1.	Teacher-made flash cards with names and pictures of tools (hammers, saws, floor joint header, nails-box, 16d, common, etc.)	Special Educ. Instructor	15 minutes daily
2.	Student participates in group discussions of types of wood used in framing, for studs, plating, roofing, etc. Practice in selecting materials in wood shop with student explaining why specific materials are used.	Vocational Education Instructor	30 minutes daily
3.	Student measures size of room, desks, papers, walls, and lengths of wood using ruler and tape measure.	Special Educ. Instructor	30 minutes daily
4.	Student reads silently and answers comprehension questions. <u>Shop Talk</u> - Allyn and Bacon <u>General Shop Procedures</u>- Dorsett <u>Mechanic's Illustrated</u>	Special Educ. and Vocational Instructor	30 minutes daily
5.	Individual work - World of Work Units. Read silently and answer questions at the end of each unit. Complete forms collected from local industry related to each unit.	Special Educ. Instructor	30 minutes daily
6.	Using "Magic Circle" format, the school psychologist will discuss with group learning and coping skills for personal problem areas, financial management, sex roles, male-female relationships. Materials from Human Development Program Innerchange.	School Psy. Peers	90 minutes weekly

Objective Number	Educational Materials and Procedures	Individual Responsible	Amount of Time
7.	On-the-job experience in building a house.	Vocational Education Instructor	120 minutes daily
8.	Participation in senior P.E. during first hour, development of leisure-time sports.	P.E. Instructor	60 minutes daily
9.	J.C. will assume increasing amounts of responsibility for his own learning as enduced by his willingness to complete required projects and seek assistance from teachers.	J.C. and all teachers	daily - each class

AMOUNT OF TIME IN REGULAR CLASS

The student will be placed in regular vocational education programs and physical education for instructional purposes.

EVALUATION CRITERIA

1. Student will demonstrate skills in carpentry at building site.
2. Student will complete Carpentry Math Mastery Tests with 80% accuracy.

I.E.P. PARTICIPANTS AND TEAM MEMBERS

1. _____
2. _____
3. _____

Conclusion

Work must be begin to influence training programs for vocational educators, special educators, and school psychologists to incorporate experiences to prepare their respective specialists to function as team members in vocational education settings. Antecedent to this effort, professional organizations and individual professionals, through inservice and consultation, must encourage State Departments of Education and State Departments of Vocational-Technical Education (where they exist) to endorse the team approach to the programming and delivery of services for special needs learners.

Changes must transpire in the field; we cannot await the products of university training programs to implement the team approach. Lines of communication must be established and strengthened among vocational educators, special educators, and school psychologists. The ideal setting for this to begin is the IEP meeting. Dependent upon which professional of the yet-to-be-comprised team is currently attending the IEP meeting, will be who initiates development of a communication network. In most instances, the special educator will be the professional who will invite the school psychologist and the vocational educator to become actively involved in the IEP programming for the handicapped learner.

Local-level inservice programs can provide ideal settings for sharing information, competencies and needs. These inservice efforts can be supported by federal monies obtained by grants from the Bureau of Education for the Handicapped (BEH), Department

of Health, Education and Welfare (HEW).

Administrative support will be easier to obtain now than it was several years ago. Besieged by the regulations of the Vocational Education Amendments of 1976 (P.L. 94-482) and the Education of Handicapped Act (P.L. 94-142), administrators have awakened to the necessity for comprehensive programming for special needs learners. Seeking administrative support from several organizational units might be necessary since area vocational schools often are administratively separate from secondary schools. School psychological services may be attached to yet another administrative unit.

Most professions have experienced efforts at teaming of one kind or another, and total satisfaction with joint efforts is seldom achieved. If, however, special needs learners at the secondary level are to achieve the status of productive citizens, realizing a sense of independence and a sense of personal worth, we must set aside self-contained roles and merge to emerge as a dynamic team.

REFERENCES

Godla, L. Program changes to accommodate students. American Vocational Journal, 1978, Vol. 53, No. 3, p. 29-32.

Goodman, L. and Price, M. BEH final regulations for learning disabilities: implications for the secondary school. Learning Disability Quarterly, 1978, Vol. 1, No. 4, p. 73-79.

Grill, J. Identification of learning disabled adolescents. Academic Therapy, 1977, Vol. 13, No. 1, p. 23-28.

Laurie, T.E., Buchwach, H., Silverman, R., and Zigman, N. Teaching secondary learning disabled students in the mainstream. Learning Disability Quarterly, 1978, Vol. 1, No. 4, p. 62-72.

Phelps, L.A., Evans, R.N., Abbas, E.K., and Frison, K.D. Vocational Education for the Special Needs Students: Competencies and Models for Personnel Preparation. Bureau of Educational Research, University, Urbana-Champaign, 1976.

Vance, H.B. Trends in secondary curriculum development. Academic Therapy, 1977, Vol. 13, No. 1, p. 29-35.